30 Patewood Drive, Suite 300
Patewood Plaza One
Greenville, SC 29615

864.281.0030 PHONE
864.281.0288 FAX

www.TRCsolutions.com

February 11, 2014

Ms. Patricia Simmons Pierre
Remedial Project Manager
United States Environmental Protection Agency, Region 2
290 Broadway FL19
New York, 10007-1866

Subject: Dayco Corporation/L. E. Carpenter Superfund Site
USEPA ID No. NJD002168748
Response to Agency Comments on the Additional Wetland Delineation Sampling Results

Dear Patricia:

TRC Environmental Corporation (TRC), on behalf of L.E. Carpenter & Company (LEC), has developed responses to United States Environmental Protection Agency (USEPA) and New Jersey Department of Environmental Protection (NJDEP) review comments received on January 22, 2014 on the additional wetland delineation sampling results presented in Progress Report 39 (TRC, September 10, 2013). For ease of review, Agency comments are presented in Attachment 1 in **bold**, ***italicized*** text, followed by our responses to each comment.

The following summarizes TRC responses to the primary agency concerns highlighted in USEPA's January 22 review comments letter:

Extent of residual contamination within the wetland area

The vertical and lateral extent of residual contamination within the wetland area has been sufficiently characterized as initially described in TRC's *MW-30 Remedial Investigation (RI) Summary and Bench-scale Treatability Study Results* (TRC Technical Memorandum dated April 26, 2012). The comprehensive delineation data contained in that report was collected during our December 2011 supplemental Remedial Investigation (RI). Based on these 2011 supplemental RI data, together with historical information and clarifications provided in the attached Response to Comments, further investigation is not required to delineate residual impacts or to support risk-based remedy decision making for the wetland area.

In addition, a phytoremediation pilot study is currently underway within and downgradient of the majority of the residual contamination. TRC is further concerned that additional soil investigations and/or installation of new monitoring wells within the defined area of residual contamination would likely damage the current phytoremediation pilot study. Significant damage to the wetlands, including clearing of existing large trees, boulders, and underbrush, would be required in order to access portions of the wetland area not previously sampled.

Wetland groundwater contamination may discharge to the Rockaway River

The attached Response to Comments highlights recent and historical data that supports a potentially completed pathway between residual groundwater impacts and the Rockaway River. River sediment and associated "pore" water samples collected adjacent to the wetland residual source area indicate the presence of DEHP within near-surface sediments, but no detection of BTEX constituents. However, routine quarterly monitoring of a number of Rockaway River monitoring stations reflect that little to no site constituents are detected in surface waters sampled adjacent to the wetland residual source area. For example, out of thirty five (35) site quarterly sampling events since completion of the 2005 source reduction, DEHP has only been detected at surface water collection station SW-R-1 four (4) times. Observed concentrations at SW-R-1 have ranged from 1.0 to 2.0 ug/L, slightly above the NJDEP FW2 Surface Water Quality Standard of 0.95 ug/L. Similarly, ethylbenzene and xylenes have only been detected above the NJDEP FW2 Surface Water Quality Standards at station SW-R-1 in five (5) out of 35 sampling events.

Reductions in the groundwater concentrations in the wetland area is the most effective means of further protecting the adjacent surface water resource. The phytoremediation pilot study currently underway in the wetland area is design to achieve that desired concentration reduction in groundwater.

In support of the Response to Comments. Supplemental Figures, as itemized below, have been included as Attachment 2.

- Figure 1 – Total DEHP Soil Isoconcentration Contours (mg/kg) from the 2011 MW-30 Supplemental RI
- Figure 2 – 3rd Quarter 2013 Total DEHP Isoconcentration Contours (mg/L)
- Figure 3 – Ethylbenzene Soil Isoconcentration Contours (mg/kg) from the 2011 MW-30 Supplemental RI

- Figure 4 –Xylenes Soil Isoconcentration Contours (mg/kg) from the 2011 MW-30 Supplemental RI
- Figure 5 – 3rd Quarter 2013 Ethylbenzene Isoconcentration Contours (mg/L)
- Figure 6 – 3rd Quarter 2013 Xylenes Isoconcentration Contours (mg/L)
- Figure 7 – Cross-Section W – E
- Figure 8 – Cross-Section N – S
- Figure 9 – Hydrogeologic Conceptual Model of the MW-30 Area

TRC would be happy to participate in a conference call to facilitate resolution of remaining agency concerns.

Sincerely,

TRC Environmental Corporation

Karen C. Saucier, PhD
Project Coordinator

Attachments: Attachment 1 Response to Comments
Attachment 2 Supporting Figures

cc: Ernie Schaub, LEC
Barry Culp. PG (TRC)

Attachment 1
Responses to EPA and NJDEP Comments

Attachment 1
Responses to EPA and NJDEP Comments on Additional Wetland Delineation Sampling Results Dayco/LE Carpenter Corporation Superfund Site, Wharton, NJ

1. ***EPA and NJDEP have reviewed the results from the additional wetland delineation at the above- referenced site. These results are presented in Progress Report 39, dated September 10, 2013. Although the approved work plan called for the sampling of eight well points, the report indicates that only four well points were successfully sampled due to refusal and/or lack of adequate water at certain locations.***

The temporary well point installation and sampling program, presented in Progress Report 39, was designed to serve as a baseline event to evaluate efficacy of the phytoremediation pilot study, and was not intended to be used as additional wetland delineation. The comprehensive wetland area delineation was completed as part of the Supplemental Remedial Investigation (RI), completed in December, 2011, as documented in the *MW-30 Remedial Investigation (RI) Summary and Bench-scale Treatability Study Results* technical memorandum (TRC, April 26, 2012).

The eight temporary well point installations and analytical results were designed to document baseline conditions for shallow groundwater for the phytoremediation study within the wetland area. Five of eight locations were successfully sampled for benzene, toluene, ethylbenzene, and xylenes (BTEX) constituents and four of eight locations were sampled successfully for di-2-ethylhexyl phthalate (DEHP) as described in TRC's September 10, 2013 Progress Report. The well point results are further illustrated on Figure 2 (DEHP), Figure 5 (ethylbenzene), and Figure 6 (xylenes) provided in Attachment 2 to this letter.

Although three of the proposed well points for the baseline event could not be sampled due to a lack of water, TRC believes that existing historical data is sufficient to verify the extent of impacts in the wetland area as discussed in additional detail below.

2. ***Results from well point location TW-35-5 show 150,000 ppb of DEHP (GWQS-3ppb), 22,000 ppb of ethylbenzene (GWQS-700 ppb), and 130,000 ppb of total xylene (GWQS-1000 ppb); concentrations at other well point locations are lower but still significant. These results confirm the presence of significant groundwater contamination in the wetland area that could be discharging to the Rockaway River.***

Temporary well point TW-35-5 was installed adjacent MW-35 to provide a comparison of groundwater results from an established, properly constructed and developed monitoring well against groundwater samples from a temporary, relatively undeveloped well point not containing a filter pack. It is most likely that the high concentrations observed in well point samples are the result of solids retained in the sample, and are biased high with respect to actual groundwater quality conditions.

Groundwater impacts have been observed in the wetland area since the post-remedial monitoring wells were installed in 2008. However, recent concentrations of site constituents of interest in monitoring well MW-35 are below the results obtained from the TW-35-5 grab groundwater sample. We agree, as the review comments assert, that constituent levels observed in samples from TW-35-5 do indicate that impacted soil and groundwater are present in the wetland area.

However, concentrations observed in downgradient groundwater samples collected from TW-35-7 and TW-35-8 both show markedly reduced concentrations and confirm that shallow groundwater contamination between the existing monitoring wells and the river is defined. Specifically, the concentration of xylenes in TW-35-7 and TW-35-8 (0.015 mg/L and 0.25 mg/L respectively) is three to four orders of magnitude lower than concentration observed in MW-35S (130 mg/L). Similarly, the DEHP observed in the groundwater sample from TW-35-8 and the pore-water sample obtained from PW-R-3 (0.012 mg/L and 0.050 mg/L respectively) are four to five orders of magnitude lower than the level found in MW-35S.

These data, together with quarterly sampling results for river surface water samples, confirm that migration of contaminants into the river is limited and that the bulk of residual contamination following the 2005 source reduction is tied up within the predominantly fine-grained soil matrices within a defined portion of the wetland area.

A work plan to fully delineate and characterize the residual contamination in the wetland (area east of the 2005 Source Reduction Area) should be prepared. The following should be considered during the development of the work plan:

3. ***Continuous borehole profile sampling of both soil and groundwater is needed to fully and accurately delineate the both the lateral and vertical extent of the contaminants.***

Both vertical and lateral extent of residual contamination in the wetland area were delineated during the Supplemental RI conducted in December 2011, as presented in the *MW-30 Remedial Investigation (RI) Summary and Bench-scale Treatability Study Results* technical memorandum (TRC, April 26, 2012). During that event, continuous borehole profiling was conducted using sonic drilling technology that provided continuous soil core. The selected soil core intervals were:

- screened with a PID,
- geologically evaluated (see borehole logs included as Appendix B to the 2012 report),
- tested for the presence of product using in-field OIL-IN-SOIL™ field-screening test kits, and
- submitted for BTEX and DEHP laboratory analysis.

The MW-30 RI Report did not include cross sections for the area. We have prepared and attached two cross sections using data from the MW-30 Supplemental RI; Figure 7

is a west-east cross section through the area and Figure 8 is a north-south cross section. Figure 9 is a schematic drawing that portrays a conceptual regional and site specific model of groundwater flow. The strong upward vertical gradients that exist within the Site as shown on the conceptual model diagram are supported by on-site head data from existing and historical well clusters.

4. ***Samples must be collected at sufficient depth at each location to clearly demonstrate the bottom elevation of the impacted area(s). Targeted depths for all boring and sampling should be a minimum of 30 feet bgs.***

The attached cross sections confirm that the 20-30 foot depths of the MW-30 Supplemental RI soil borings, coupled with historical data, are sufficient to establish vertical extent. Lower constituent concentrations observed in saturated soil samples may be due in part to drag-down phenomena during sampling. No significant contamination is expected to occur at deeper levels based upon data from other on-site well clusters. Namely, historical data from the previously abandoned MW-14 cluster located within the wetland area, as shown on the attached figures, and existing well clusters MW-28 and MW-30 reinforce the absence of impacts at deeper levels. The 2005 source reduction confirmed the shallow occurrence of the former product and product smear zone for the original primary source area.

5. ***A contingency for additional step-outs of drilling locations should be included in the work plan.***

The step-out borings installed as part of the MW-30 Supplemental RI are adequate to show the limits of contamination. We believe that additional step out borings are not necessary given the results from the MW-30 Supplemental RI.

Additionally, the phytoremediation pilot study being conducted along the northern and southern limits of the wetland area, the routine inundation of boundary areas between the wetland and the Rockaway River, and existing surface features limit available access for additional characterization activities.

6. ***Based upon the problems encountered using direct push technology for this area, it is recommended that a more robust drilling technique(s) be employed to ensure that drilling and sampling of all locations can be accomplished, at sufficient depths, regardless of the presence of buried boulders.***

TRC relied upon sonic drilling technology during the MW-30 Supplemental RI to advance the 20 soil borings in the wetland area to depths of 20-30 feet. However, as previously stated, we believe that additional delineation in the wetland area is not necessary given the results from the MW-30 Supplemental RI.

7. ***While the use of a peristaltic pump was approved for the initial delineation effort, only groundwater sampling technique in accordance with NJDEP Technical Regulations will be applicable for the full delineation and characterization work plan.***

As previously stated, we believe that additional delineation in the wetland area is not necessary given the results from the MW-30 Supplemental RI.

TRC proposes that future groundwater sampling be performed in accordance with the March 6, 2013 EPA Groundwater Sampling Operating Procedure document. A peristaltic pump will be used to sample the wetland area wells because of the limited vertical thickness of water in these wells that is available for sampling purposes. Specifically, due to the low permeability's of the shallow soils in the wetland area, drawdown observed during sampling would lower groundwater below the intake of standard bladder pumps.

8. ***Figure 1, submitted as part of Progress Report No. 39 is not an adequate representation of the area or sampling results. The work plan should include confirmation that the sampling results will be reported in cross sectional and surface view maps that are of sufficient scale and detail for focus on the area of concern. The scale used in Figure 1 was insufficient.***

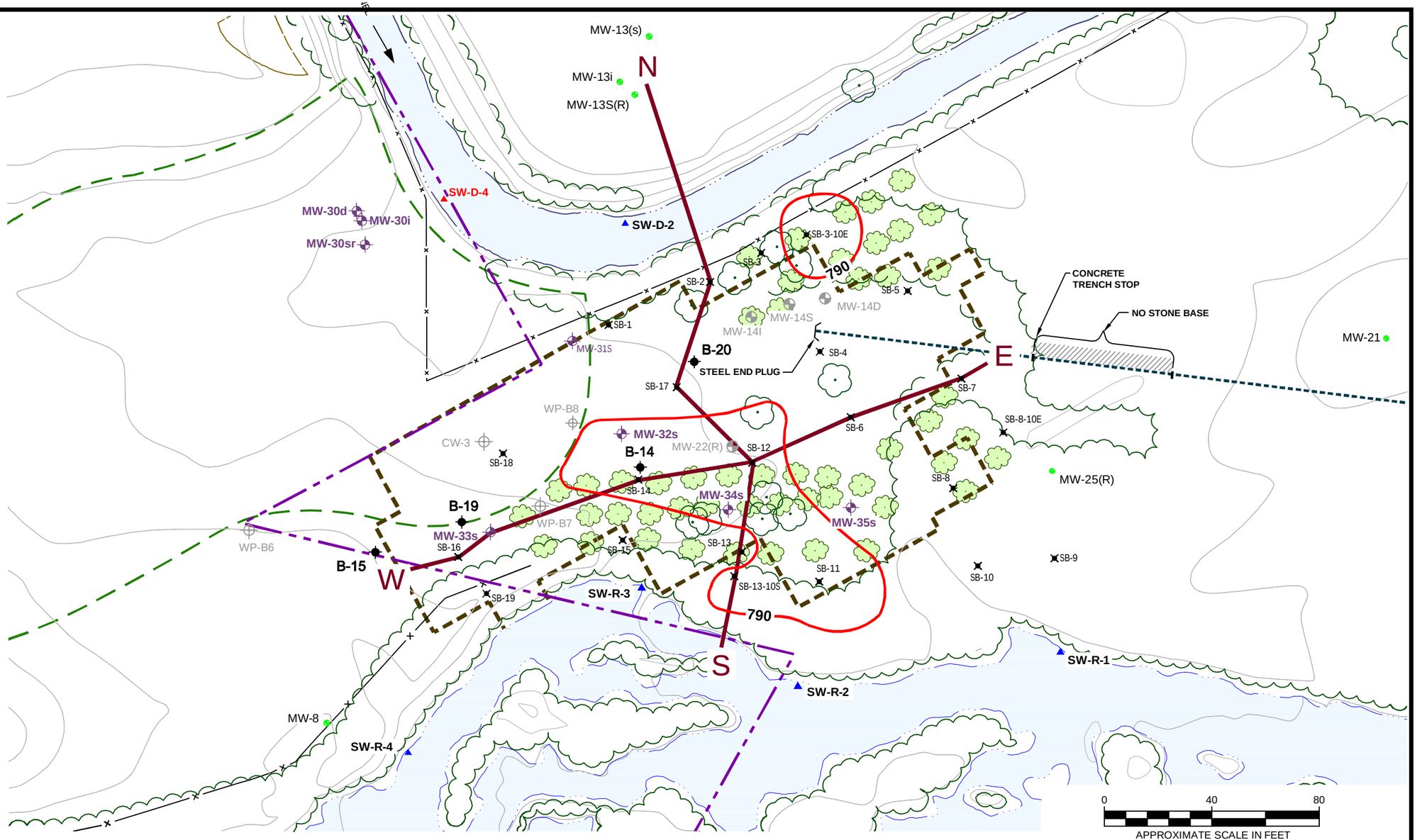
The Figures presented in Attachment 2 have been prepared at a scale (1 inch equals 40 feet) that better focuses on the wetland area. As previously discussed, the requested cross-sections are included as Figures 7 and 8.

9. ***The groundwater analytical results should also be evaluated against the NJDEP's FW2 Surface Water Quality Standards.***

We believe there is not a defensible technical basis to compare groundwater results to surface water criteria. TRC proposes that Site surface water data continue to be compared to the FW2 Surface Water Quality Standards and Site groundwater/pore-water data be compared to the NJDEP groundwater quality standards.

Attachment 2
Supporting Figures

Boring No.	Depth Interval (bgs)	Sample Depth (ft bgs)	Oil In Soil	*DEHP (ppm)
SB-1	0-10	7.5	N	180
	10-15	--	N	--
	15-20	17.5	N	--
	20-25	24.5	N	1.2
SB-2	5-15	5.0	N	170
	15-20	15.0	N	0.86
SB-3	0-10	5.0	N	330
	10-20	11.0	N	98
		14.5	N	3.7
SB-3-10E	0-10	6.0	N	1,500
	10-15	14.5	N	1.5
	15-20	--	N	--
SB-4	0-10	7.0	N	180
	10-20	11.5	N	1.8
SB-5	0-10	5.5	N	180
	10-20	10.0	N	10
SB-6	0-10	6.5	N	23
	10-20	14.0	N	ND
SB-7	0-5	0.5	N	ND
	5-20	5.0	N	7.2
SB-8	5-15	13.0	N	84
		14.5	N	ND
SB-8-10E	0-10	7.5	N	ND
	10-20	19.5	N	0.6
SB-9	0-5	0.5	N	ND
	5-15	5.0	N	ND
SB-10	5-10	7.5	N	200
	10-20	19.5	N	1.3
SB-11	0-10	7.5	Y+	4,500
	10-15	14.5	N	31
SB-12	0-10	7.0	Y	--
		9.0	Y+	2,100
	10-20	16.5	N	2.2
SB-13	0-10	7.5	Y	--
		9.5	Y+	700
	10-30	29.5	N	1.5
SB-13-10S	5-25	9.5	N	1,200
		21.5	N	8.4
SB-14	5-10	9.5	Y+	940
	10-15	12	Y+	--
	15-25	25	N	--
SB-15	0-10	9.5	Y	--
	10-20	10.5	Y	310
	20-25	25.0	N	0.49
SB-16	0-15	9.5	N	190
	15-25	24.5	N	2.7
SB-17	0-15	7.5	Y	120
	15-20	19.5	N	0.73
SB-18	5-10	7.5	Y	--
		9.5	Y	590
	10-20	12.15	Y	--
		19.5	--	120
SB-19	0-20	0.5, 5,10,12,15	Y	--
		14	--	240
		19.5	--	9.9



LEGEND

- APPROXIMATE PROPERTY LINE
- FENCE LINE
- TREES
- MW-25(R) — GROUNDWATER ELEVATION MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- MW-29s — PRMP MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- SB-18 — SOIL BORING LOCATION
- MW-24 — ABANDONED MONITORING WELL
- RW-2 — ABANDONED RECOVERY WELL
- CW-3 — ABANDONED CAISSON WELLS
- PHYTOREMEDIATION TREE LOCATION
- SW-R-1 — SURFACE WATER SAMPLING LOCATION (D = DITCH; R = RIVER)
- AREA WHERE PCB IMPACTED SOILS WERE EXCAVATED
- OUTLINE OF 2005 SOURCE REDUCTION AREA AND SUBSURFACE SLURRY MONOLITH
- 630 — POST-REMEDIATION GROUND SURFACE ELEVATIONS, CONTOUR INTERVAL = 1 FT
- ABANDONED SEWER LINE
- 790 — ISOCONCENTRATION FOR BIS (2-ETHYLHEXYL) PHTHALATE (DEHP) (PPM) IN SOIL BORING SAMPLES (790 PPM = NJDEP IMPACT TO GROUNDWATER SOIL SCREENING LEVEL)
- W — E — CROSS-SECTION LOCATOR

NOTES

1. BASE MAP DEVELOPED FROM TOPOGRAPHIC SURVEY PROVIDED BYJAMES M.STEWART, INC. LAND SURVEYORS, DRAWING NO 2793-03.DWG, DATED 02-14-02 AS REVISED 04-10-07 (DRAWING NO. 314907REV.DWG).
2. AS DESCRIBED IN THE November 2005 RAR (SEE FIGURE 9 IN THAT REPORT), THE SLURRY MONOLITH AT AND PARALLEL TO THE DRAINAGE CHANNEL DITCH ENDS APPROXIMATELY 10 FEET WEST OF THE ACTUAL WATERS EDGE.
3. OIL IN SOIL RESULT NOTES:

   N = NON-DETECT FIELD SCREENING KIT
   Y = DIFFUSE OIL DETECTED IN FIELD SCREENING TEST KIT
   Y+ = PRODUCT DETECTED IN FIELD SCREENING KIT

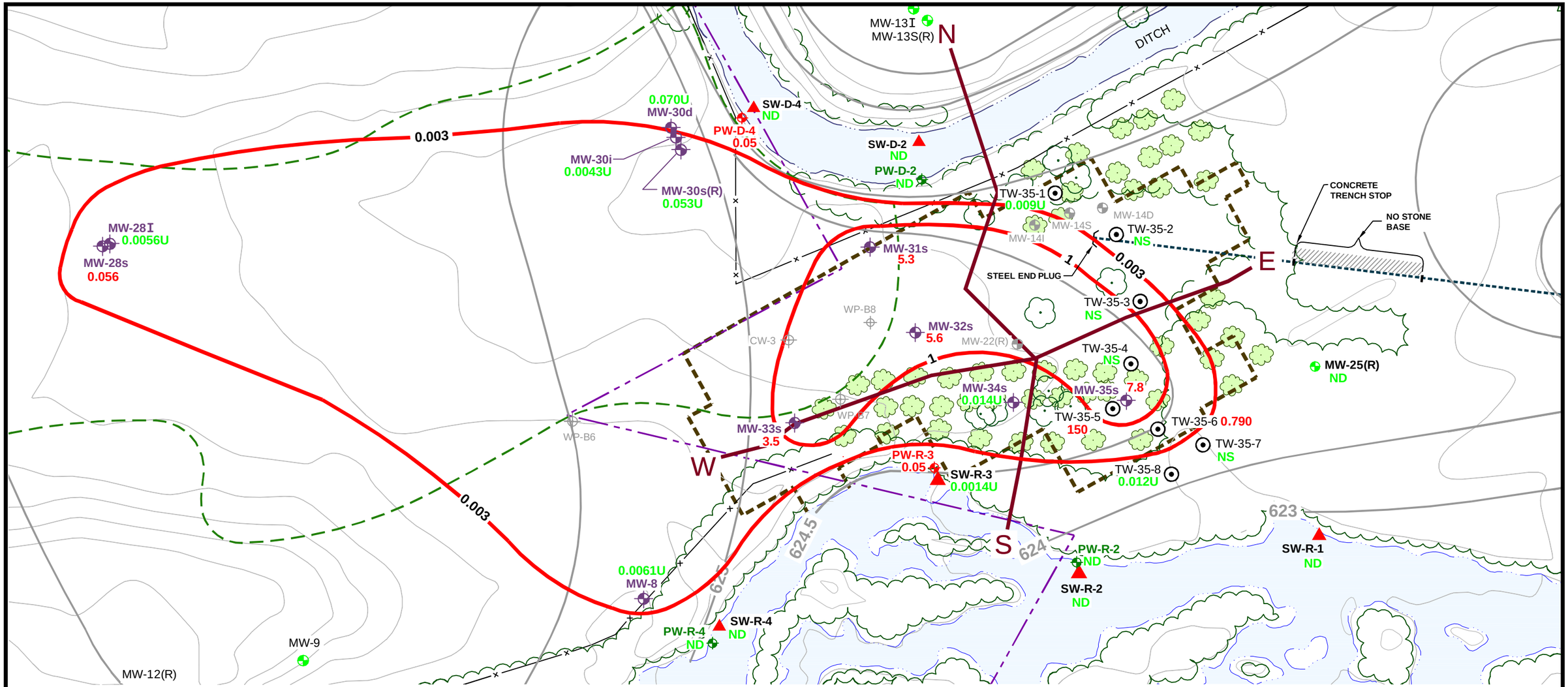
PROJECT: **DAYCO CORPORATION / L.E. CARPENTER SUPERFUND SITE WHARTON, NEW JERSEY**

TITLE: **TOTAL SOIL DEHP ISOCONCENTRATION CONTOURS (mg/Kg) FROM THE 2011 MW-30 SUPPLEMENTAL RI**

DRAWN BY: SJL / DGS / WAB	SCALE:	PROJ. NO.	212321.0000.03
CHECKED BY: JD / SP	AS INDICATED	FILE NO.	212321.0000.03.01.dwg
APPROVED BY: BC	DATE PRINTED:		FIGURE 1
DATE: FEBRUARY 2014			

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\LE Carpenter\212321\0000\03_RESPONSE TO COMMENTS\212321.0000.03.01.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 0.69 Mb\bmc041007
Plot Date: February 7, 2014
Plot Time: 12:49 PM
Attached Xrefs:
Attached Images:
Layout: FIG01 Total DEHP Contours



LEGEND

- APPROXIMATE PROPERTY LINE
- FENCE LINE
- TREES
- MW-13S — GROUNDWATER ELEVATION MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- MW-30i — PRMP MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- GEI-3I — PIEZOMETER LOCATION
- SW-R-5 — SURFACE WATER SAMPLING LOCATION (D = DITCH; R = RIVER)
- TW-35-7 — TEMPORARY WELL LOCATION
- MW-24 — ABANDONED MONITORING WELL
- RW-2 — ABANDONED RECOVERY WELL
- CW-3 — ABANDONED CAISSON WELLS
- PHYTOREMEDIATION TREE LOCATION
- PW-D-2 — PORE WATER CONTAMINANTS OF CONCERN EXCEED NJDEP GROUNDWATER QUALITY STANDARDS
- PW-D-2 — PORE WATER CONTAMINANTS OF CONCERN DO NOT EXCEED NJDEP GROUNDWATER QUALITY STANDARDS
- 1 — ISOCONCENTRATION FOR TOTAL MAXIMUM DEHP (mg/L) IN GROUNDWATER
- 0.027 — TOTAL DEHP (mg/L) IN GROUNDWATER
- ND — NOT DETECTED
- 0.0061U — FALSE-POSITIVE ANALYTICAL RESULTS
- 630 — POST-REMEDIATION GROUND SURFACE ELEVATIONS
- 625 — SHALLOW GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- AREA WHERE PCB IMPACTED SOILS WERE EXCAVATED
- OUTLINE OF 2005 SOURCE REDUCTION AREA AND SUBSURFACE SLURRY MONOLITH
- ABANDONED SEWER LINE
- W — E — CROSS-SECTION LOCATOR

NOTES

1. BASE MAP DEVELOPED FROM TOPOGRAPHIC SURVEY PROVIDED BYJAMES M.STEWART, INC. LAND SURVEYORS, DRAWING NO 2793-03.DWG, DATED 02-14-02 AS REVISED 04-10-07 (DRAWING NO. 314907REV.DWG).
2. AS DESCRIBED IN THE November 2005 RAR (SEE FIGURE 9 IN THAT REPORT), THE SLURRY MONOLITH AT AND PARALLEL TO THE DRAINAGE CHANNEL DITCH ENDS APPROXIMATELY 10 FEET WEST OF THE ACTUAL WATERS EDGE.
3. MW-30 AREA MONITORING WELLS WERE RE-SURVEYED IN 2011 DURING SURVEY OF INVESTIGATION SOIL BORINGS. SURVEY CONDUCTED BY DENNIS SKLAR, INC.

0 40 80
APPROXIMATE SCALE IN FEET

PROJECT: DAYCO CORPORATION / L.E. CARPENTER SUPERFUND SITE
WHARTON, NEW JERSEY

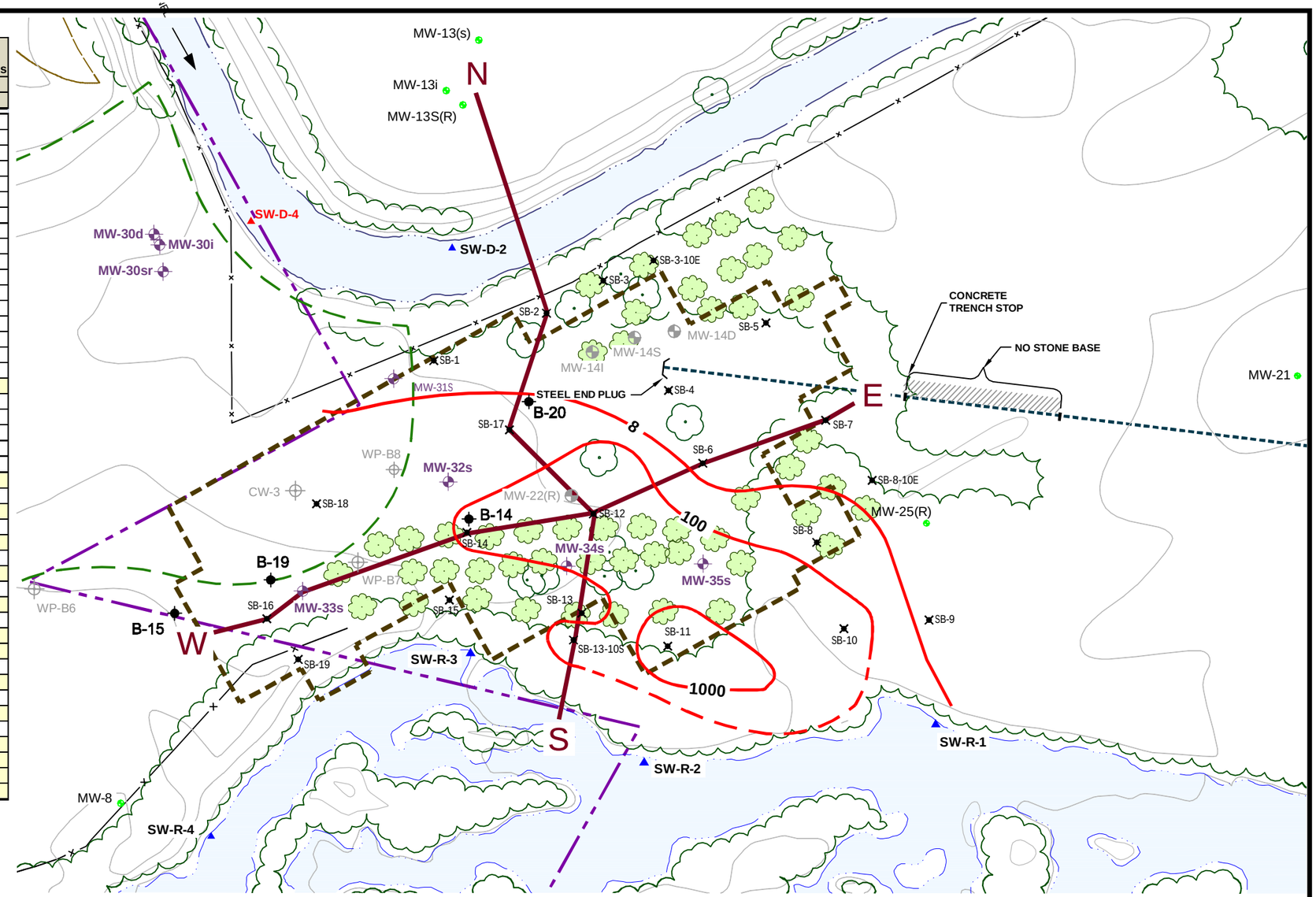
TITLE: 3RD QTR 2013
TOTAL DEHP ISOCONCENTRATION CONTOURS (mg/L) FOR THE MW-30 AREA

DRAWN BY: SJL / DGS / WAB	SCALE:	PROJ. NO.	212321.0000.03
CHECKED BY: JD / SP	AS INDICATED	FILE NO.	212321.0000.03.02.dwg
APPROVED BY: BC	DATE PRINTED:		FIGURE 2
DATE: FEBRUARY 2014			

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\LE Carpenter\212321\0000\03_RESPONSE TO COMMENTS\212321.0000.03.02.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 0.46 Mb\bmc020111
Plot Date: February 7, 2014
Plot Time: 12:49 PM
Attached Xref's:
Attached Images:
Layout: FIG02 Total DEHP MW-30 Area 3Q2013

Analyte		Benzene	Toluene	Ethylbenzene	Total Xylenes
Impact to GW Soil Screening Level		0.005	4	8	12
Units		mg/kg	mg/kg	mg/kg	mg/kg
SB-1 (7.5-8.0)	12/10/2011	<0.0050	<0.0050	**0.066**	**0.26**
SB-1 (24.5-25.0)	12/10/2011	<0.0050	<0.0050	**0.0054**	**0.016**
SB-2 (5.0-5.5)	12/9/2011	<0.0056	<0.0056	<0.0056	<0.017
SB-2 (15.0-15.5)	12/9/2011	<0.0053	<0.0053	<0.0053	<0.016
SB-3 (5.0-5.5)	12/9/2011	<0.0058	<0.0058	**0.013**	**0.066**
SB-3 (11.0-11.5)	12/9/2011	<0.0054	<0.0054	<0.0054	<0.016
SB-3 (14.5-15.0)	12/9/2011	<0.0051	<0.0051	<0.0051	<0.015
SB-3-10E (5.5-6.0)	12/13/2011	<0.0055	<0.0055	<0.0055	<0.016
SB-3-10E (14.5-15.0)	12/13/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-4 (6.5-7.0)	12/9/2011	<0.0050	<0.0050	**0.023**	**0.091**
SB-4 (11.5-12.0)	12/9/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-5 (5.0-5.5)	12/8/2011	<0.0051	<0.0051	**0.016**	**0.045**
SB-5 (10.0-10.5)	12/8/2011	<0.0053	<0.0053	<0.0053	<0.016
SB-6 (6.5-7.0)	12/6/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-6 (14.0-14.5)	12/6/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-7 (0.5-1.0)	12/8/2011	<0.0051	<0.0051	<0.0051	<0.015
SB-7 (5.0-5.5)	12/8/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-8 (13.0-13.5)	12/8/2011	<0.40	<0.40	**32**	**98**
SB-8 (14.5-15.0)	12/8/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-8-10E (7.5-8.0)	12/13/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-8-10E (19.5-20.0)	12/13/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-9 (0.5-1.0)	12/8/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-9 (4.5-5.0)	12/8/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-10 (7.0-7.5)	12/12/2011	<0.42	**2.8**	**440**	**2,100**
SB-10 (19.5-20.0)	12/12/2011	<0.0050	<0.0050	**0.12**	**0.21**
SB-11 (7.5-8.0)	12/12/2011	<0.40	**4.7**	**1,200**	**6,800**
SB-11 (14.5-15.0)	12/12/2011	<0.0050	<0.0050	**1.1**	**5.8**
SB-12 (8.5-9.0)	12/9/2011	<4.2	<4.2	**700**	**2,900**
SB-12 (16.5-17.0)	12/9/2011	<0.0050	<0.0050	**0.017**	**0.080**
SB-13 (9.5-10.0)	12/12/2011	<0.79	<0.79	**87**	**420**
SB-13 (29.5-30.0)	12/12/2011	<0.0050	<0.0050	**0.040**	**0.25**
SB-13-10S (9.5-10.0)	12/12/2011	<0.39	**0.47**	**340**	**1,700**
SB-13-10S (21.5-22.0)	12/12/2011	<0.0053	<0.0053	<0.0053	<0.016
SB-14 (9.5-10.0)	12/10/2011	<0.050	<0.10	**110**	**180**
SB-15 (10.0-10.5)	12/9/2011	<0.44	**0.50**	**75**	**350**
SB-15 (25.0-25.5)	12/9/2011	<0.0051	<0.0051	**0.0097**	**0.040**
SB-16 (9.5-10.0)	12/10/2011	<0.0050	<0.0050	**12**	**54**
SB-16 (24.5-25.0)	12/10/2011	<0.0050	<0.0050	**0.0076**	**0.036**
SB-17 (7.5-8.0)	12/13/2011	<0.050	<0.10	**15**	**54**
SB-17 (19.5-20.0)	12/13/2011	<0.0050	<0.0050	**0.012**	**0.045**
SB-18 (9.5-10.0)	12/13/2011	<0.050	<0.10	**49**	**150**
SB-18 (19.5-20.0)	12/13/2011	<0.050	<0.10	**12**	**36**
SB-19 (14.0-14.5)	12/13/2011	<0.050	**0.13**	**18**	**94**
SB-19 (19.5-20.0)	12/13/2011	<0.0050	<0.0050	**2.6**	**14**



LEGEND

- APPROXIMATE PROPERTY LINE
- FENCE LINE
- TREES
- MW-25(R) — GROUNDWATER ELEVATION MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- MW-29s — PRMP MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- SB-18 — SOIL BORING LOCATION
- MW-24 — ABANDONED MONITORING WELL
- RW-2 — ABANDONED RECOVERY WELL
- CW-3 — ABANDONED CAISSON WELLS
- SW-R-1 — SURFACE WATER SAMPLING LOCATION (D = DITCH; R = RIVER)
- AREA WHERE PCB IMPACTED SOILS WERE EXCAVATED
- OUTLINE OF 2005 SOURCE REDUCTION AREA AND SUBSURFACE SLURRY MONOLITH
- 630 — POST-REMEDIATION GROUND SURFACE ELEVATIONS, CONTOUR INTERVAL = 1 FT
- ABANDONED SEWER LINE
- 100 — ISOCONCENTRATION CONTOURS (mg/kg)
- PHYTOREMEDIATION TREE LOCATION
- W — E — CROSS-SECTION LOCATOR

NOTES

1. BASE MAP DEVELOPED FROM TOPOGRAPHIC SURVEY PROVIDED BYJAMES M.STEWART, INC. LAND SURVEYORS, DRAWING NO 2793-03.DWG, DATED 02-14-02 AS REVISED 04-10-07 (DRAWING NO. 314907REV.DWG).
2. AS DESCRIBED IN THE NOVEMBER 2005 RAR (SEE FIGURE 9 IN THAT REPORT), THE SLURRY MONOLITH AT AND PARALLEL TO THE DRAINAGE CHANNEL DITCH ENDS APPROXIMATELY 10 FEET WEST OF THE ACTUAL WATERS EDGE.
3. mg/kg = MILLIGRAMS PER KILOGRAM

PROJECT: **DAYCO CORPORATION / L.E. CARPENTER SUPERFUND SITE WHARTON, NEW JERSEY**

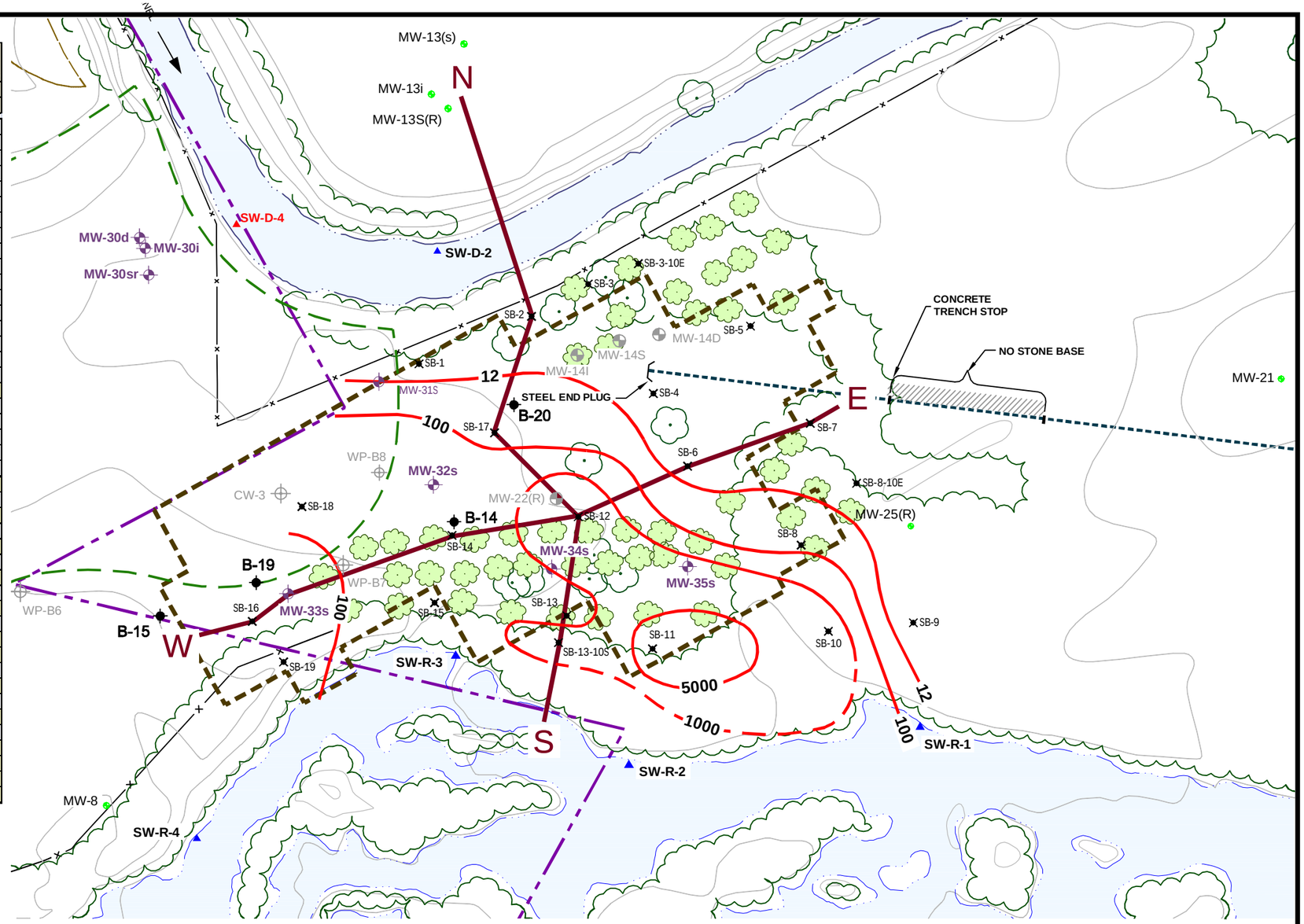
TITLE: **SOIL ETHYLBENZENE ISOCONCENTRATION CONTOURS (mg/Kg) FROM THE 2011 MW-30 SUPPLEMENTAL RI**

DRAWN BY: SJL / DGS / WAB	SCALE: AS INDICATED	PROJ. NO. 212321.0000.03	
CHECKED BY: TAB / SP		FILE NO. **212321.0000.03.03-04.dwg**	
APPROVED BY: BC	DATE PRINTED:	**FIGURE 3**	
DATE: FEBRUARY 2014			

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\LE Carpenter\212321\0000\03_RESPONSE TO COMMENTS\212321.0000.03.03-04.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 0.82 Mb\bmc041007
Plot Date: February 7, 2014
Plot Time: 1:02 PM
Attached Xrefs:
Attached Images:
Layout: FIG03 EB Contours

Analyte		Benzene	Toluene	Ethylbenzene	Total Xylenes
Impact to GW Soil Screening Level		0.005	4	8	12
Units		mg/kg	mg/kg	mg/kg	mg/kg
SB-1 (7.5-8.0)	12/10/2011	<0.0050	<0.0050	**0.066**	**0.26**
SB-1 (24.5-25.0)	12/10/2011	<0.0050	<0.0050	**0.0054**	**0.016**
SB-2 (5.0-5.5)	12/9/2011	<0.0056	<0.0056	<0.0056	<0.017
SB-2 (15.0-15.5)	12/9/2011	<0.0053	<0.0053	<0.0053	<0.016
SB-3 (5.0-5.5)	12/9/2011	<0.0058	<0.0058	**0.013**	**0.066**
SB-3 (11.0-11.5)	12/9/2011	<0.0054	<0.0054	<0.0054	<0.016
SB-3 (14.5-15.0)	12/9/2011	<0.0051	<0.0051	<0.0051	<0.015
SB-3-10E (5.5-6.0)	12/13/2011	<0.0055	<0.0055	<0.0055	<0.016
SB-3-10E (14.5-15.0)	12/13/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-4 (6.5-7.0)	12/9/2011	<0.0050	<0.0050	**0.023**	**0.091**
SB-4 (11.5-12.0)	12/9/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-5 (5.0-5.5)	12/8/2011	<0.0051	<0.0051	**0.016**	**0.045**
SB-5 (10.0-10.5)	12/8/2011	<0.0053	<0.0053	<0.0053	<0.016
SB-6 (6.5-7.0)	12/6/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-6 (14.0-14.5)	12/6/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-7 (0.5-1.0)	12/8/2011	<0.0051	<0.0051	<0.0051	<0.015
SB-7 (5.0-5.5)	12/8/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-8 (13.0-13.5)	12/8/2011	<0.40	<0.40	**32**	**98**
SB-8 (14.5-15.0)	12/8/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-8-10E (7.5-8.0)	12/13/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-8-10E (19.5-20.0)	12/13/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-9 (0.5-1.0)	12/8/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-9 (4.5-5.0)	12/8/2011	<0.0050	<0.0050	<0.0050	<0.015
SB-10 (7.0-7.5)	12/12/2011	<0.42	**2.8**	**440**	**2,100**
SB-10 (19.5-20.0)	12/12/2011	<0.0050	<0.0050	**0.12**	**0.21**
SB-11 (7.5-8.0)	12/12/2011	<0.40	**4.7**	**1,200**	**6,800**
SB-11 (14.5-15.0)	12/12/2011	<0.0050	<0.0050	**1.1**	**5.8**
SB-12 (8.5-9.0)	12/9/2011	<4.2	<4.2	**700**	**2,900**
SB-12 (16.5-17.0)	12/9/2011	<0.0050	<0.0050	**0.017**	**0.080**
SB-13 (9.5-10.0)	12/12/2011	<0.79	<0.79	**87**	**420**
SB-13 (29.5-30.0)	12/12/2011	<0.0050	<0.0050	**0.040**	**0.25**
SB-13-10S (9.5-10.0)	12/12/2011	<0.39	**0.47**	**340**	**1,700**
SB-13-10S (21.5-22.0)	12/12/2011	<0.0053	<0.0053	<0.0053	<0.016
SB-14 (9.5-10.0)	12/10/2011	<0.050	<0.10	**110**	**180**
SB-15 (10.0-10.5)	12/9/2011	<0.44	**0.50**	**75**	**350**
SB-15 (25.0-25.5)	12/9/2011	<0.0051	<0.0051	**0.0097**	**0.040**
SB-16 (9.5-10.0)	12/10/2011	<0.0050	<0.0050	**12**	**54**
SB-16 (24.5-25.0)	12/10/2011	<0.0050	<0.0050	**0.0076**	**0.036**
SB-17 (7.5-8.0)	12/13/2011	<0.050	<0.10	**15**	**54**
SB-17 (19.5-20.0)	12/13/2011	<0.0050	<0.0050	**0.012**	**0.045**
SB-18 (9.5-10.0)	12/13/2011	<0.050	<0.10	**49**	**150**
SB-18 (19.5-20.0)	12/13/2011	<0.050	<0.10	**12**	**36**
SB-19 (14.0-14.5)	12/13/2011	<0.050	**0.13**	**18**	**94**
SB-19 (19.5-20.0)	12/13/2011	<0.0050	<0.0050	**2.6**	**14**



0 40 80

APPROXIMATE SCALE IN FEET

LEGEND

- APPROXIMATE PROPERTY LINE
- FENCE LINE
- TREES
- MW-25(R) — GROUNDWATER ELEVATION MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- MW-29s — PRMP MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- SB-18 — SOIL BORING LOCATION
- MW-24 — ABANDONED MONITORING WELL
- RW-2 — ABANDONED RECOVERY WELL
- CW-3 — ABANDONED CAISSON WELLS
- SW-R-1 — SURFACE WATER SAMPLING LOCATION (D = DITCH; R = RIVER)
- AREA WHERE PCB IMPACTED SOILS WERE EXCAVATED
- OUTLINE OF 2005 SOURCE REDUCTION AREA AND SUBSURFACE SLURRY MONOLITH
- 630 — POST-REMEDIATION GROUND SURFACE ELEVATIONS, CONTOUR INTERVAL = 1 FT
- ABANDONED SEWER LINE
- 100 — ISOCONCENTRATION CONTOURS (mg/kg)
- PHYTOREMEDIATION TREE LOCATION
- W — E — CROSS-SECTION LOCATOR

NOTES

1. BASE MAP DEVELOPED FROM TOPOGRAPHIC SURVEY PROVIDED BYJAMES M.STEWART, INC. LAND SURVEYORS, DRAWING NO 2793-03.DWG, DATED 02-14-02 AS REVISED 04-10-07 (DRAWING NO. 314907REV.DWG).
2. AS DESCRIBED IN THE NOVEMBER 2005 RAR (SEE FIGURE 9 IN THAT REPORT), THE SLURRY MONOLITH AT AND PARALLEL TO THE DRAINAGE CHANNEL DITCH ENDS APPROXIMATELY 10 FEET WEST OF THE ACTUAL WATERS EDGE.
3. mg/kg = MILLIGRAMS PER KILOGRAM

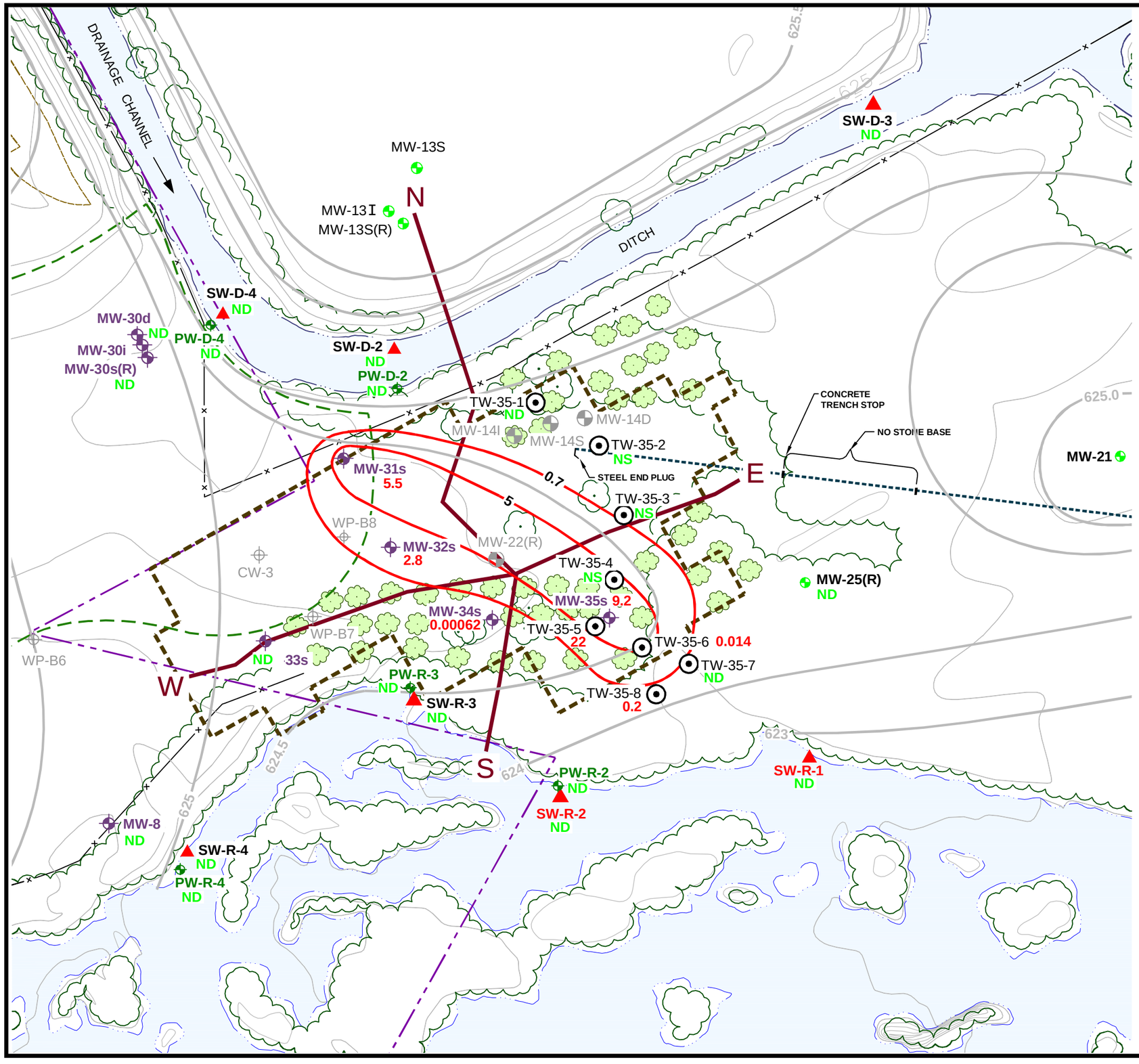
PROJECT: **DAYCO CORPORATION / L.E. CARPENTER SUPERFUND SITE WHARTON, NEW JERSEY**

TITLE: **SOIL XYLENES ISOCONCENTRATION CONTOURS (mg/Kg) FROM THE 2011 MW-30 SUPPLEMENTAL RI**

DRAWN BY: SJL / DGS / WAB	SCALE:	PROJ. NO.	212321.0000.03
CHECKED BY: TAB / SP	AS INDICATED	FILE NO.	212321.0000.03.03-04.dwg
APPROVED BY: BC	DATE PRINTED:	**FIGURE 4**	
DATE: FEBRUARY 2014			

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\LE Carpenter\212321\0000\03_RESPONSE TO COMMENTS\212321.0000.03.03-04.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 0.82 Mb\bmc041007
Plot Date: February 7, 2014
Plot Time: 1:01 PM
Attached Xref's:
Attached Images:
Layout: FIG04 XYL Contours



LEGEND

- APPROXIMATE PROPERTY LINE
- FENCE LINE
- TREES
- MW-13S — GROUNDWATER ELEVATION MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- MW-30i — PRMP MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- GEI-3I — PIEZOMETER LOCATION
- SW-R-5 — SURFACE WATER SAMPLING LOCATION (D = DITCH; R = RIVER)
- TW-35-7 — TEMPORARY WELL LOCATION
- MW-24 — ABANDONED MONITORING WELL
- RW-2 — ABANDONED RECOVERY WELL
- CW-3 — ABANDONED CAISSON WELLS
- PW-D-2 — PORE WATER CONTAMINANTS OF CONCERN EXCEED NJDEP GROUNDWATER QUALITY STANDARDS
- PW-D-2 — PORE WATER CONTAMINANTS OF CONCERN DO NOT EXCEED NJDEP GROUNDWATER QUALITY STANDARDS
- PHYTOREMEDIATION TREE LOCATION
- 10 — ISOCONCENTRATION FOR ETHYLBENZENE (mg/L) IN GROUNDWATER
- 25 — ETHYLBENZENE (mg/L) IN GROUNDWATER
- ND — NOT DETECTED
- 630 — POST-REMEDIATION GROUND SURFACE ELEVATIONS
- 625 — SHALLOW GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- AREA WHERE PCB IMPACTED SOILS WERE EXCAVATED
- OUTLINE OF 2005 SOURCE REDUCTION AREA AND SUBSURFACE SLURRY MONOLITH
- ABANDONED SEWER LINE
- W — E — CROSS-SECTION LOCATOR

NOTES

1. BASE MAP DEVELOPED FROM TOPOGRAPHIC SURVEY PROVIDED BYJAMES M.STEWART, INC. LAND SURVEYORS, DRAWING NO 2793-03.DWG, DATED 02-14-02 AS REVISED 04-10-07 (DRAWING NO. 314907REV.DWG).
2. AS DESCRIBED IN THE November 2005 RAR (SEE FIGURE 9 IN THAT REPORT), THE SLURRY MONOLITH AT AND PARALLEL TO THE DRAINAGE CHANNEL DITCH ENDS APPROXIMATELY 10 FEET WEST OF THE ACTUAL WATERS EDGE.
3. MW-30 AREA MONITORING WELLS WERE RE-SURVEYED IN 2011 DURING SURVEY OF INVESTIGATION SOIL BORINGS. SURVEY CONDUCTED BY DENNIS SKLAR, INC .

0 40' 80'

APPROXIMATE SCALE IN FEET

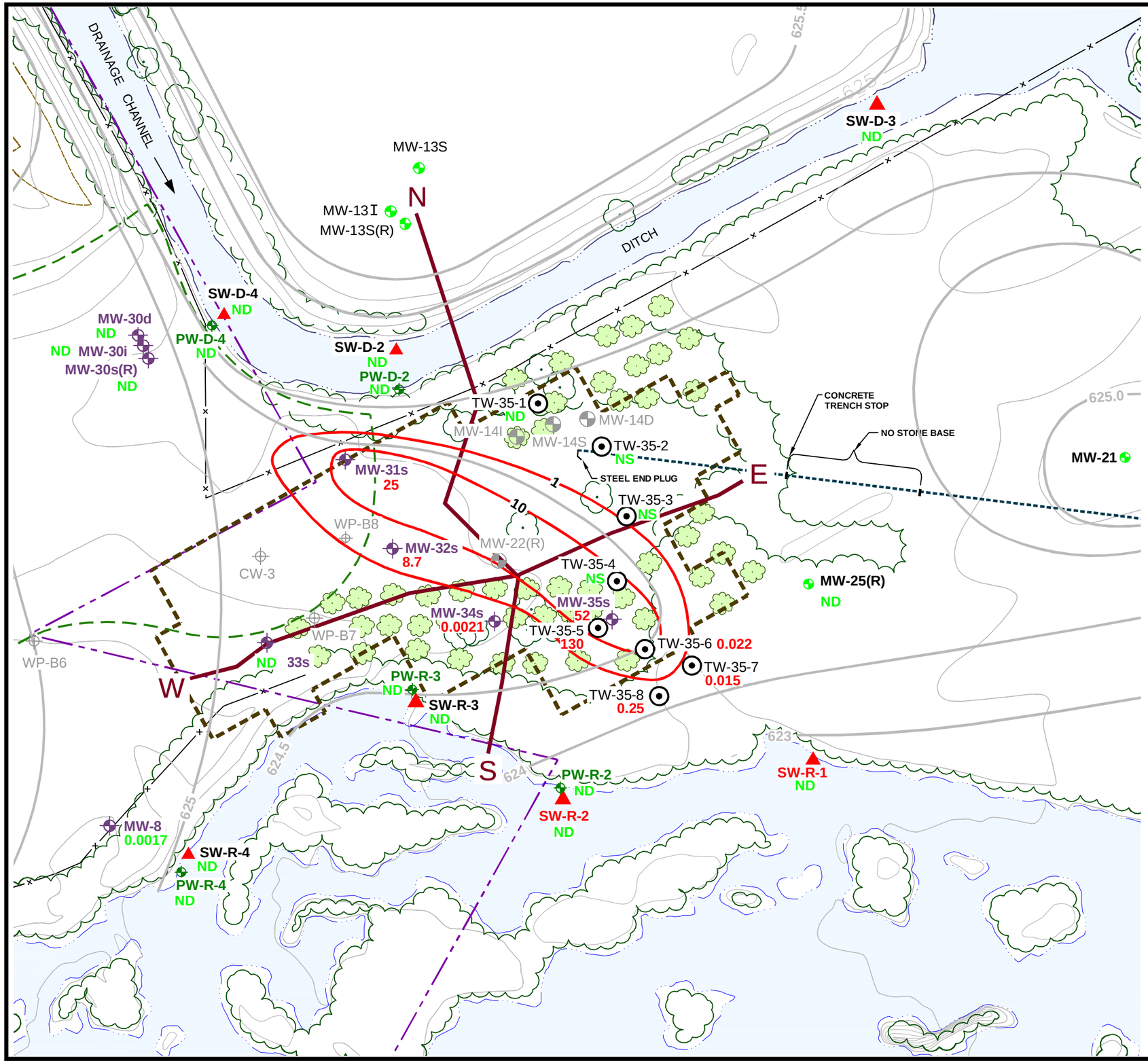
PROJECT: **DAYCO CORPORATION / L.E. CARPENTER SUPERFUND SITE WHARTON, NEW JERSEY**

TITLE: **3RD QUARTER 2013 ETHYLBENZENE ISOCONCENTRATION CONTOURS (mg/L) FOR THE MW-30 AREA**

DRAWN BY: DGS	SCALE: AS INDICATED	PROJ. NO. 212321.0000.03	
CHECKED BY: SP		FILE NO. 212321.0000.03.05-06.dwg	
APPROVED BY: -	DATE PRINTED:	**FIGURE 5**	
DATE: FEBRUARY 2014			

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\LE Carpenter\212321\0000\03_RESPONSE TO COMMENTS\212321.0000.03.05-06.dwg
Operator Name: STEHLE.DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 0.57 Mb\bmc020111
Plot Date: February 7, 2014
Plot Time: 1:21 PM
Attached Xrefs:
Attached Images:
Layout: FIG05 EB 3Q



LEGEND

- APPROXIMATE PROPERTY LINE
- FENCE LINE
- TREES
- MW-13S — GROUNDWATER ELEVATION MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- MW-30i — PRMP MONITORING WELL LOCATION AND NUMBER (s = shallow, i = intermediate, d = deep)
- GEI-3I — PIEZOMETER LOCATION
- SW-R-5 — SURFACE WATER SAMPLING LOCATION (D = DITCH; R = RIVER)
- TW-35-7 — TEMPORARY WELL LOCATION
- MW-24 — ABANDONED MONITORING WELL
- RW-2 — ABANDONED RECOVERY WELL
- CW-3 — ABANDONED CAISSON WELLS
- PW-D-2 — PORE WATER CONTAMINANTS OF CONCERN EXCEED NJDEP GROUNDWATER QUALITY STANDARDS
- PW-D-2 — PORE WATER CONTAMINANTS OF CONCERN DO NOT EXCEED NJDEP GROUNDWATER QUALITY STANDARDS
- PHYTOREMEDIATION TREE LOCATION
- 10 — ISOCONCENTRATION FOR XYLENES (mg/L) IN GROUNDWATER
- 25 — XYLENES (mg/L) IN GROUNDWATER
- ND — NOT DETECTED
- 630 — POST-REMEDIATION GROUND SURFACE ELEVATIONS
- 625 — SHALLOW GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- AREA WHERE PCB IMPACTED SOILS WERE EXCAVATED
- OUTLINE OF 2005 SOURCE REDUCTION AREA AND SUBSURFACE SLURRY MONOLITH
- ABANDONED SEWER LINE
- W — E — CROSS-SECTION LOCATOR

NOTES

1. BASE MAP DEVELOPED FROM TOPOGRAPHIC SURVEY PROVIDED BYJAMES M.STEWART, INC. LAND SURVEYORS, DRAWING NO 2793-03.DWG, DATED 02-14-02 AS REVISED 04-10-07 (DRAWING NO. 314907REV.DWG).
2. AS DESCRIBED IN THE November 2005 RAR (SEE FIGURE 9 IN THAT REPORT), THE SLURRY MONOLITH AT AND PARALLEL TO THE DRAINAGE CHANNEL DITCH ENDS APPROXIMATELY 10 FEET WEST OF THE ACTUAL WATERS EDGE.
3. MW-30 AREA MONITORING WELLS WERE RE-SURVEYED IN 2011 DURING SURVEY OF INVESTIGATION SOIL BORINGS. SURVEY CONDUCTED BY DENNIS SKLAR, INC .

0 40' 80'

APPROXIMATE SCALE IN FEET

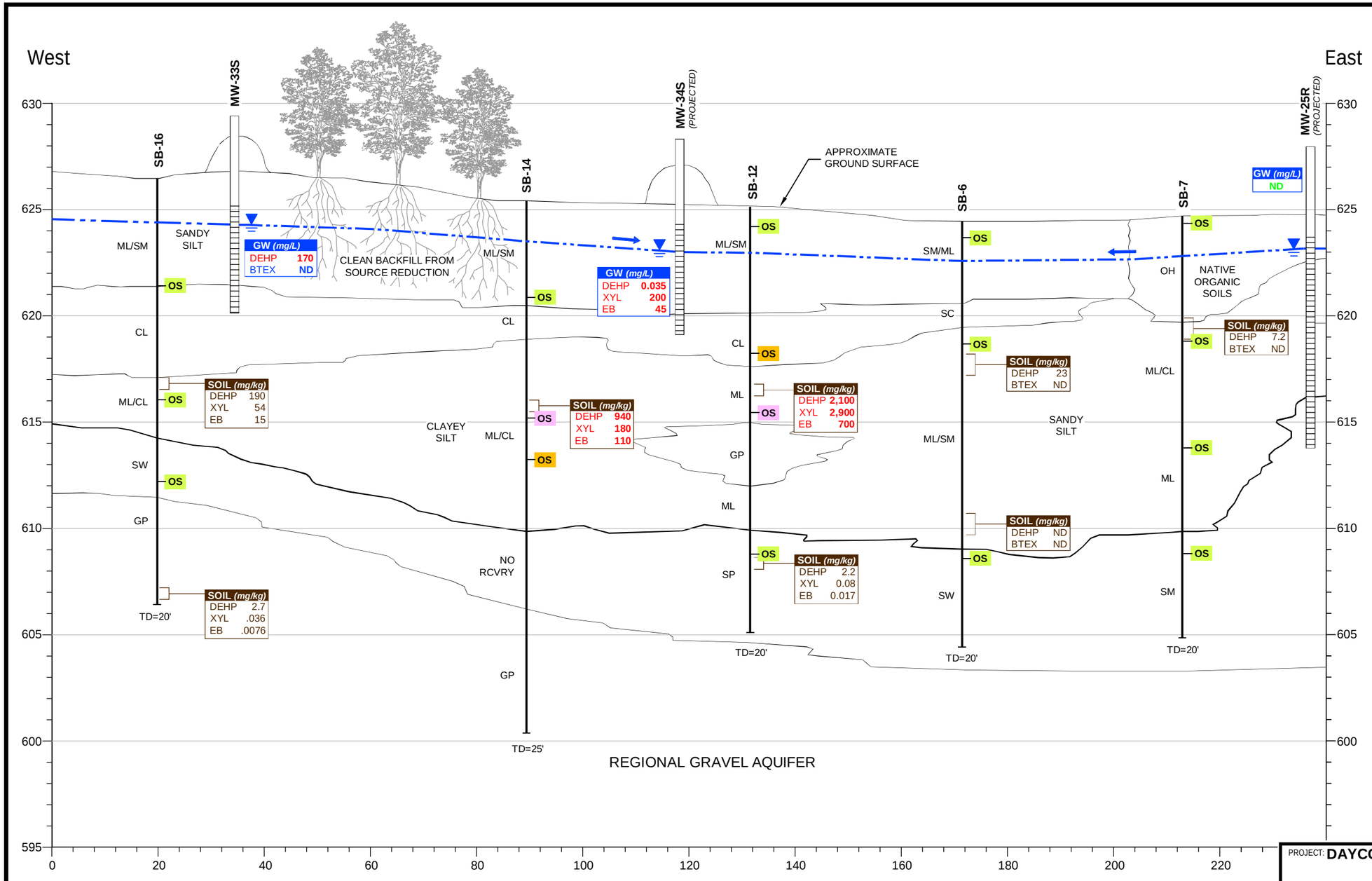
PROJECT: **DAYCO CORPORATION / L.E. CARPENTER SUPERFUND SITE WHARTON, NEW JERSEY**

TITLE: **3RD QUARTER 2013 TOTAL XYLENES ISOCONCENTRATION CONTOURS (mg/L) FOR THE MW-30 AREA**

DRAWN BY:	DGS	SCALE:	PROJ. NO. 212321.0000.03
CHECKED BY:	SP	AS INDICATED	FILE NO. 212321.0000.03.05-06.dwg
APPROVED BY:	-	DATE PRINTED:	FIGURE 6
DATE:	FEBRUARY 2014		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\LE Carpenter\212321\0000\03_RESPONSE TO COMMENTS\212321.0000.03.05-06.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 0.57 Mb\bmc020111
Plot Date: February 7, 2014
Plot Time: 1:22 PM
Attached Xrefs:
Attached Images:
Layout: FIG06 XYL 3Q



LEGEND

- MONITORING WELL
- WELL SCREEN
- SOIL BORING
- APPROXIMATE WATER TABLE LOCATION
- APPROXIMATE FLOW DIRECTION
- PHYTOREMEDIATION TREE (RIVER BIRCH AND WILLOW)

Oil In Soil Key

- OS — ND (NO OIL DETECTED)
- OS — DIFFUSE OIL DETECTED
- OS — PRODUCT DETECTED

Data Key

GW (mg/L)
DEHP 35
XYL 100,000
EB 45,000

GROUNDWATER DATA IN MICROGRAMS PER LITER (ug/L)

SOIL (mg/kg)
DEHP 2.2
XYL 0.08
EB 0.017

SATURATED SOIL DATA IN MILLIGRAMS PER LITER (ug/L)

DEHP	DIETHYLHEXYLPHTHALATE
XYL	XYLENES
EB	ETHYLBENZENE
BTEX	BENZENE, TOLUENE, ETHYLBENZE, AND XYLENES
ND	NOT DETECTED

Notes

1. CONCENTRATIONS SHOWN IN RED INDICATE EXCEEDANCE OF NJDEP GROUNDWATER OR GROUNDWATER-PROTECTION (SOIL) CRITERIA.

PROJECT: **DAYCO CORPORATION / L.E. CARPENTER SUPERFUND SITE WHARTON, NEW JERSEY**

TITLE: **CROSS-SECTION W-E**

DRAWN BY:	DGS	SCALE:	PROJ. NO. 212321.0000.03
CHECKED BY:	JD	AS INDICATED	FILE NO. **212321.0000.03.07-08.dwg**
APPROVED BY:	JD	DATE PRINTED:	**FIGURE 7**
DATE:	FEBRUARY 2014		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\LE Carpenter\212321\0000\03_RESPONSE TO COMMENTS\212321.0000.03.07-08.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386663
Dwg Size: 0.87 Mb
Plot Date: February 26, 2014
Plot Time: 8:11 AM
Attached Xref's:
Layout: FIG07 XS WE

North

South

MW-13 | SB-2 | SB-17 | SB-12 | MW-34S | SB-13 | SB-13-10S | SPW-R-3 | SED-R-3

SW | SILT | ML | SM/MC | SW | GW | GP | ML | GP | ML/SM | SW | SP | ML | CL | ML | CL/ML | ML/CL | CL | SM | SW | SM | GP | NO RCVRY

DRAINAGE DITCH | OC/CL | SP | Rockaway River

TD=17' | TD=20' | TD=20' | TD=20' | TD=30' | TD=30'

REGIONAL GRAVEL AQUIFER

?

SOIL (mg/kg)
DEHP 170
BTEX ND

SOIL (mg/kg)
DEHP 820
XYL 54
EB 12

SOIL (mg/kg)
DEHP 0.86
BTEX ND

SOIL (mg/kg)
DEHP 0.73
XYL 0.45
EB .012

SOIL (mg/kg)
DEHP 2,100
XYL 2,900
EB 700

SOIL (mg/kg)
DEHP 2.2
XYL .08
EB .017

GW (mg/L)
DEHP 0.035
XYL 200
EB 45

SOIL (mg/kg)
DEHP 700
XYL 420
EB 87

PW (mg/L)
DEHP 0.05
BTEX ND

SOIL (mg/kg)
DEHP 400
BTEX ND

SOIL (mg/kg)
DEHP 1,200
XYL 1,700
EB 340

SOIL (mg/kg)
DEHP 8.4
BTEX ND

SOIL (mg/kg)
DEHP 1.5
XYL .25
EB .04

OS

630 | 625 | 620 | 615 | 610 | 605 | 600 | 595 | 590

0 | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220

LEGEND

- MONITORING WELL
- WELL SCREEN
- SOIL BORING
- APPROXIMATE WATER TABLE LOCATION
- APPROXIMATE FLOW DIRECTION
- PHYTOREMEDIATION TREE (RIVER BIRCH AND WILLOW)

Oil In Soil Key

OS	ND (NO OIL DETECTED)
OS	DIFFUSE OIL DETECTED
OS	PRODUCT DETECTED

Data Key

GW (mg/L)
DEHP 170
BTEX ND
SURFACE WATER AND GROUNDWATER DATA IN MICROGRAMS PER LITER (ug/L)

SOIL (mg/kg)
DEHP 2.2
XYL 0.08
EB 0.017
SATURATED SEDIMENT AND SOIL DATA IN MILLIGRAMS PER LITER (ug/L)

DEHP	DIETHYLHEXYLPHTHALATE
XYL	XYLENES
EB	ETHYLBENZENE
BTEX	BENZENE, TOLUENE, ETHYLBENZE, AND XYLENES
ND	NOT DETECTED

Notes

1. CONCENTRATIONS SHOWN IN RED INDICATE EXCEEDANCE OF NJDEP GROUNDWATER OR GROUNDWATER-PROTECTION (SOIL) CRITERIA.

PROJECT: **DAYCO CORPORATION / L.E. CARPENTER SUPERFUND SITE WHARTON, NEW JERSEY**

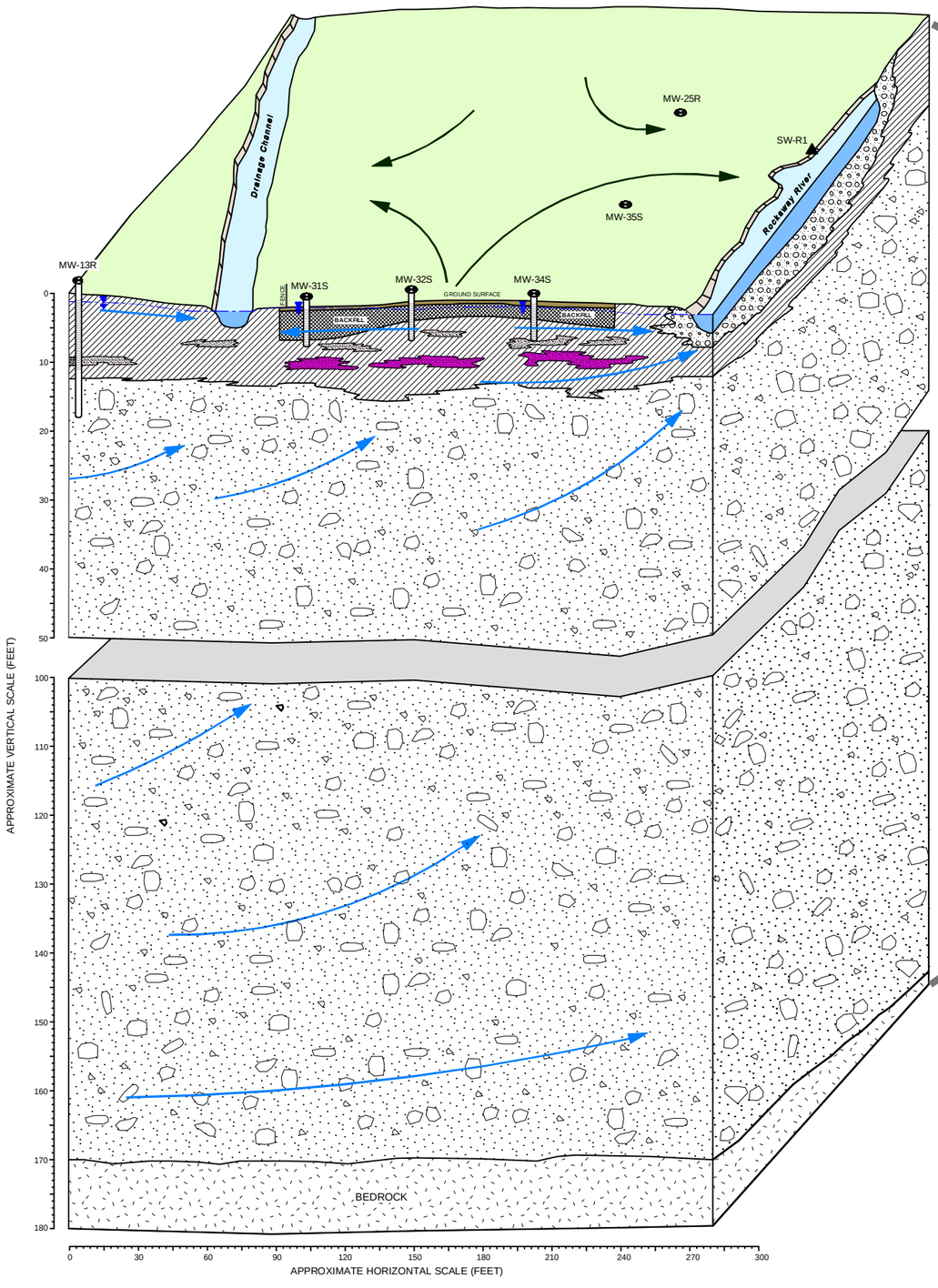
TITLE: **CROSS-SECTION N-S**

DRAWN BY:	DGS	SCALE:	PROJ. NO. 212321.0000.03
CHECKED BY:	JD	AS INDICATED	FILE NO. 212321.0000.03.07-08.dwg
APPROVED BY:	JD	DATE PRINTED:	**FIGURE 8**
DATE:	FEBRUARY 2014		

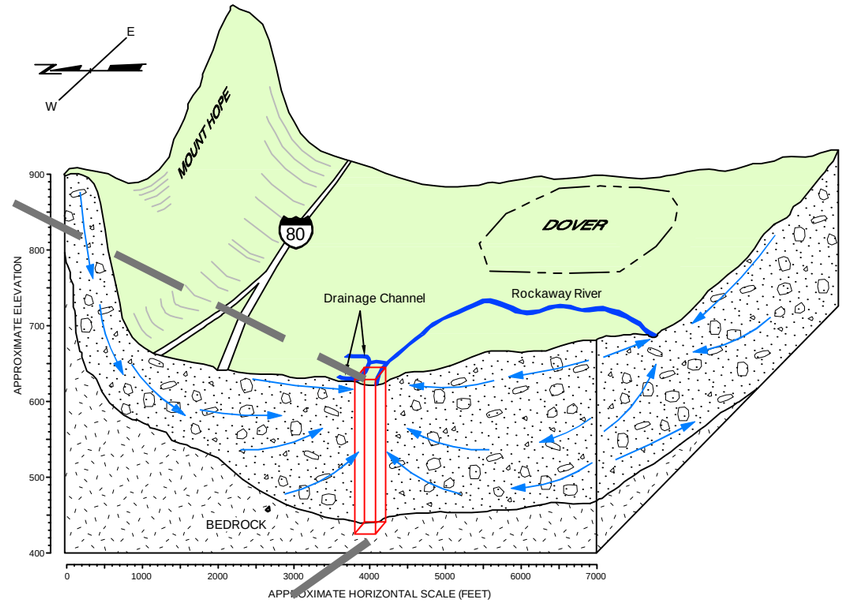
TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\LE Carpenter\212321\0000\03_RESPONSE TO COMMENTS\212321.0000.03.07-08.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 0.87 Mb
Plot Date: February 26, 2014 8:12 AM
Attached Xref's: Layout: FIG08 XS NS
(3)_Page_7;_Response Figures_2014-02-04 (3)_Page_8;

SITE MODEL



REGIONAL MODEL



LEGEND

- TOPSOIL
- BACKFILL - PREDOMINANTLY RECYCLED MEDIUM TO COARSE SAND FROM TRICON MT. HOPE
- POST-GLACIAL (HOLOCENE) GRAVELS ASSOCIATED WITH ROCKAWAY RIVER
- PREDOMINANTLY CLAY - DENSE PLASTIC WITH TRACE TO SOME SAND AND GRAVEL
- SILTY SAND TO SAND SILT ZONES WITHIN CLAY UNIT
- RESIDUAL EMULSIONS OF NAPL TRAPPED WITHIN SILTY SAND ZONES BELOW THE WATER TABLE
- GLACIAL (WISCONSINAN) COARSE-GRAINED FLUVIAL OUTWASH GRAVELS
- SURFACE WATER
- APPROXIMATE WATER TABL
- APPROXIMATE GROUNDWATER FLOW PATH
- HORIZONTAL COMPONENT OF GROUNDWATER FLOW

PROJECT: **DAYCO CORPORATION / L.E. CARPENTER SUPERFUND SITE WHARTON, NEW JERSEY**

TITLE: **HYDROGEOLOGIC CONCEPTUAL MODEL OF THE MW-30 / WHARTON ENTERPRISES AREA**

DRAWN BY:	DGS	SCALE:	PROJ. NO. 212321.0000.03
CHECKED BY:	JD	AS INDICATED	FILE NO. 212321.0000.03.09.dwg
APPROVED BY:	JD	DATE PRINTED:	**FIGURE 9**
DATE:	FEBRUARY 2014		

TRC
1540 Eisenhower Place
Ann Arbor, MI 48108
Phone: 734.971.7080
Fax: 734.971.9022

PLOT DATA
Drawing Name: J:_TRC\LE Carpenter\212321\0000\03_RESPONSE TO COMMENTS\212321.0000.03.09.dwg
Operator Name: STEHLE, DIANAH
Drawing Plot Scale: 0.386863
Dwg Size: 0.89 Mb
Plot Date: February 5, 2014
Plot Time: 3:21 PM
Attached Xref's:
Attached Images:
Layout: FIG09 HYD Conc Model